

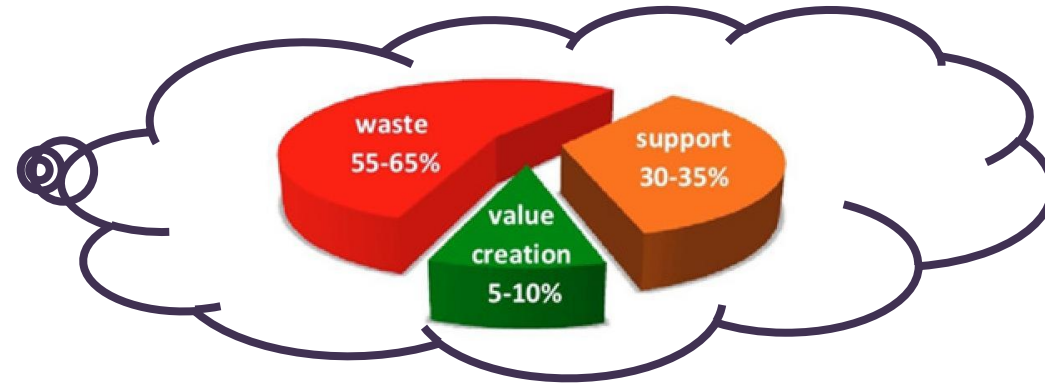
# THE PREVAILING PROCUREMENT SYSTEM AS A SOURCE OF WASTE IN CONSTRUCTION: A CASE STUDY

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# ANALYSIS AND EXAMPLES OF WASTE IN CONSTRUCTION

**IS THIS DOING THE  
 SAME THING  
 OVER AND OVER  
 BUT EXPECTING  
 DIFFERENT  
 RESULTS??**



e.g.  
 Accidents,  
 Delay, waiting,  
 Rework  
 Over-ordered materials  
 Damaged materials  
 Multiple handling of  
 materials  
 Making-Do  
 Poor payment systems  
 Duplicate insurance cover  
 Settling disputes after PC  
 Tendering  
 Procuring services on cost

**What  
 the  
 customer  
 wants**

What we have to do to  
 enable us to create what  
 the customer wants  
 e.g.  
 Procurement  
 Taxes  
 Insurance  
 Logistics  
 Accounting  
 Cost estimating  
 Commercial management  
 -for clarification see:  
 Zimina & Pasquire  
 (2011a)

*Institutionalised Waste in Construction (Mossman; 2009; Sarhan et al., 2014)*

# PREVAILING CONSTRUCTION PROCUREMENT

- Poor communication
- Divided by multiple contracts
- Fragmented by work packaging
- Silo'd through individual package optimisation (*fake*)
- Creates opportunistic self-interest
- Safeguarding self-interest guides behavior (Pasquire *et al.*, 2015)
- Procurement becomes about “*who to blame*” rather than the project itself.....
- Victim of political rhetoric (*lies*) and deliberate opacity



*“Survival” becomes the commercial imperative (Farmer, 2016)*

# IS THIS IMPORTANT?



*A Conceptualisation of construction procurement as institutional arrangements (Sarhan et al., 2018)*

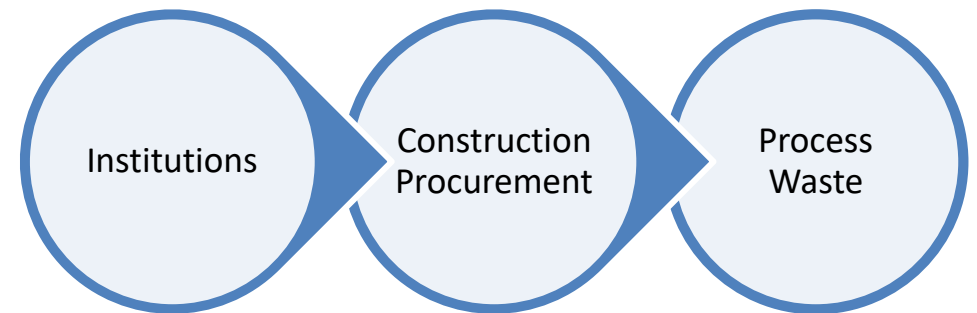
We might agree intuitively, but can we see & measure these issues?

*Research Problem:*

- ❑ Accurate ‘shared-learning’ is rarely obtainable in relation to commercial issues
- ❑ People will generally share good news but not necessarily the bad

*As a result:*

- ❑ Little is known about the links between cause-and-effect
- ❑ The same problems persist?



# Integrated Grounded-Theory Case Study Methodology

- A major UK public-sector infrastructure project worth around £174 million.
- NEC3 Contract: Main Option C – Target Contract with Activity Schedule

Professional Role / Title	Organisation	Duration (mins)	Data Collection*
Senior Design Coordinator	Main Contractor	45	P+D
Senior QS		39	P
Site Agent (CEng)		40	P+F+D
Sub-Agent		27	(S+E+D)
Project Planner			
Director and Project Manager	Specialist Subcontractor	33	P
Principal Design Engineer	Designer	40	P
ECC Project Manager (CEng, MICE)	Employed by the Client	36	P
Deputy Project Manager (CEng, MICE)		33	P+E
Senior Consultant	Financial Governance Consultancy	35	P+D

\* S= skype, P= phone, E= follow-up questions by e-mail, F= follow-up by phone, D= supporting docs sent

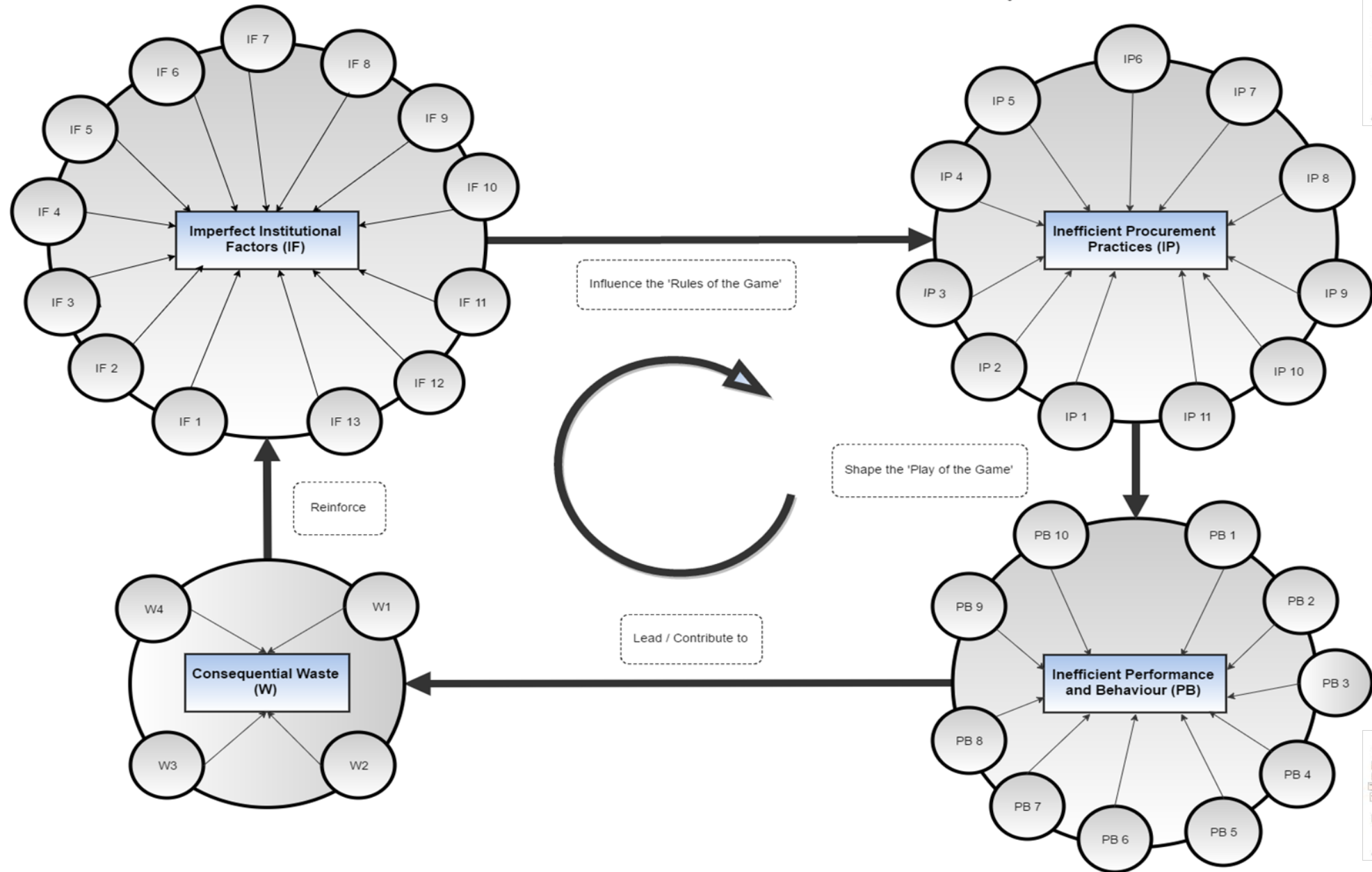
Sample information (in non-corresponding order)

# Research Findings

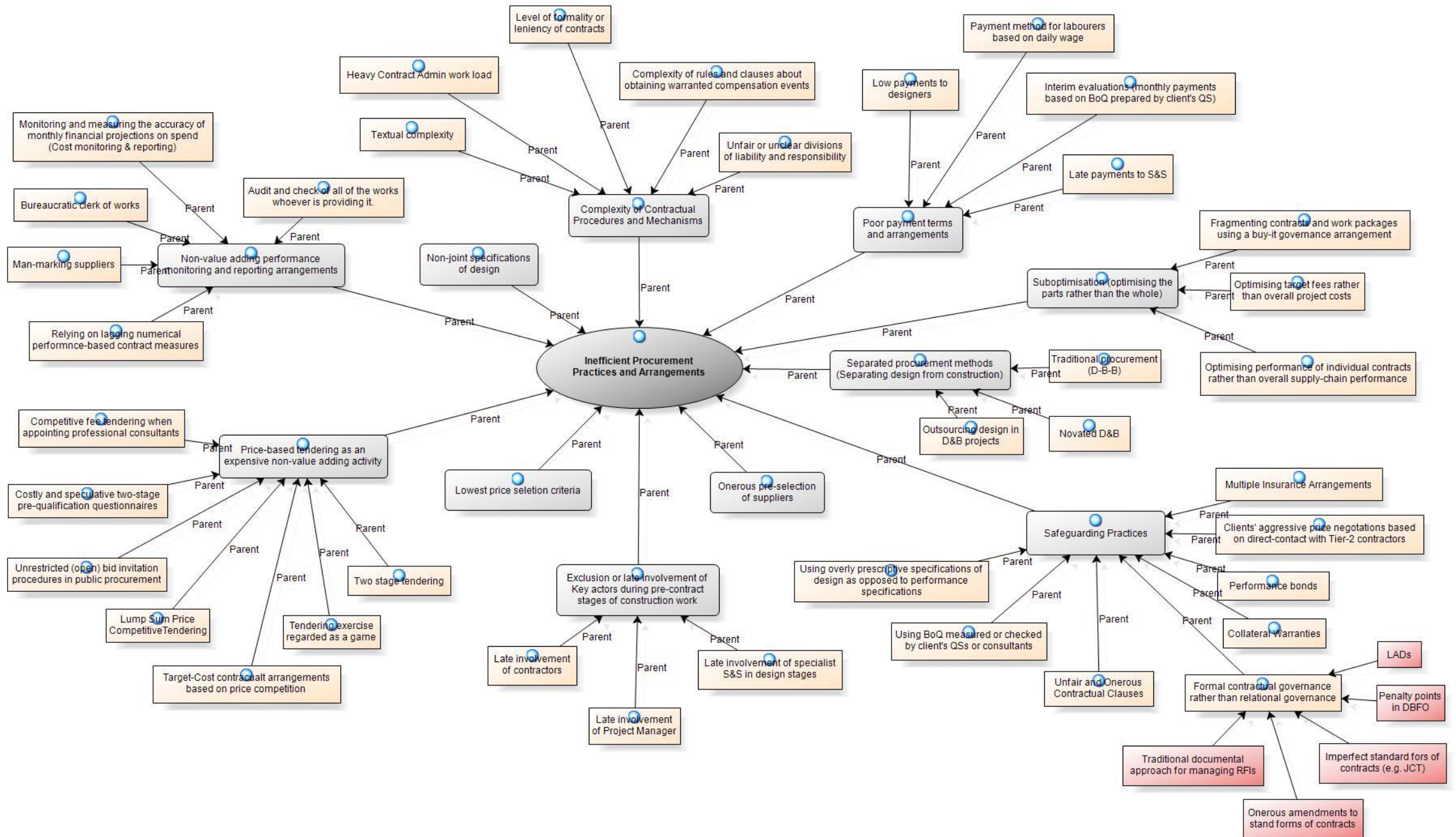


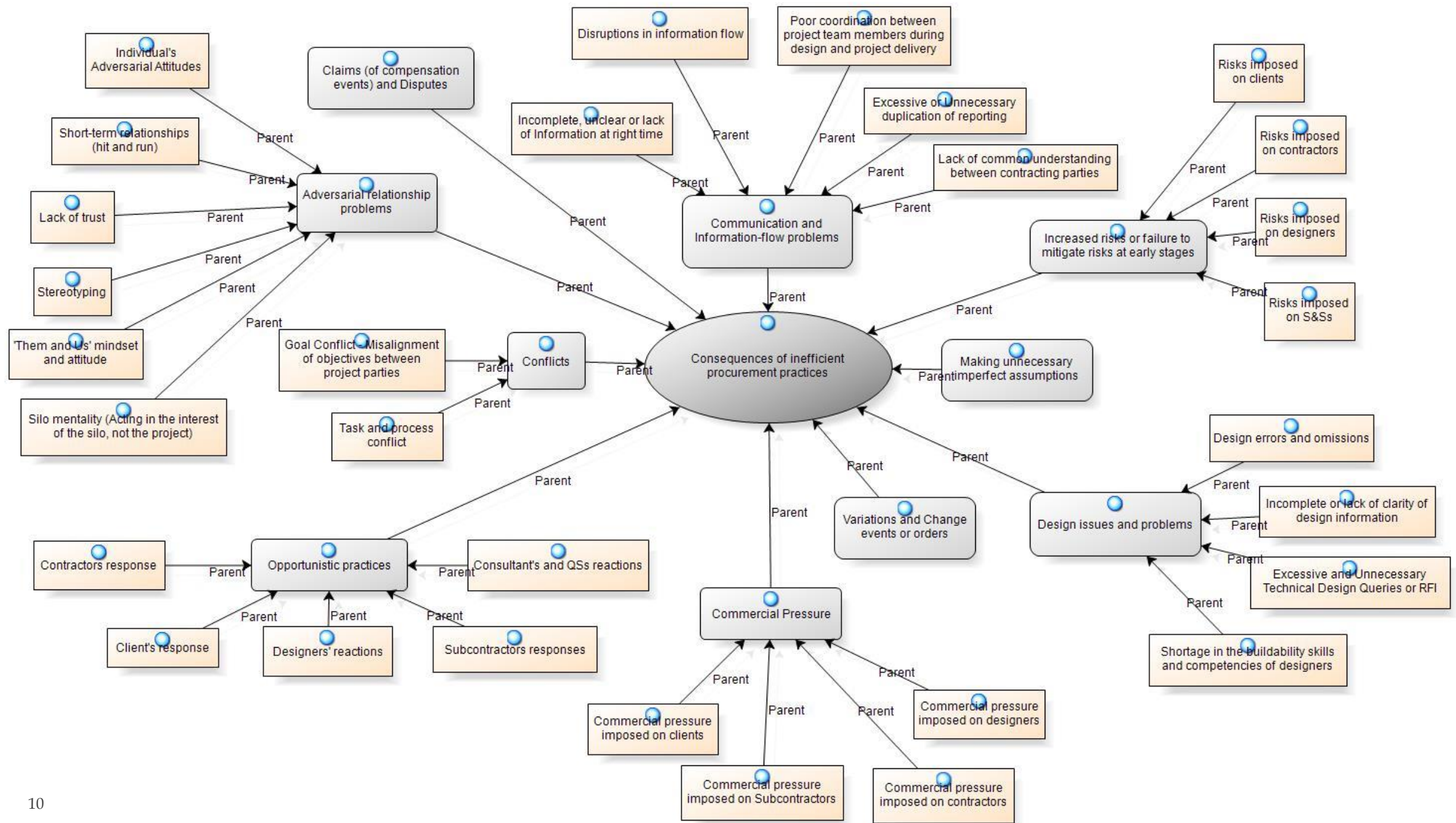


## Institutional Waste within the UK Construction Industry

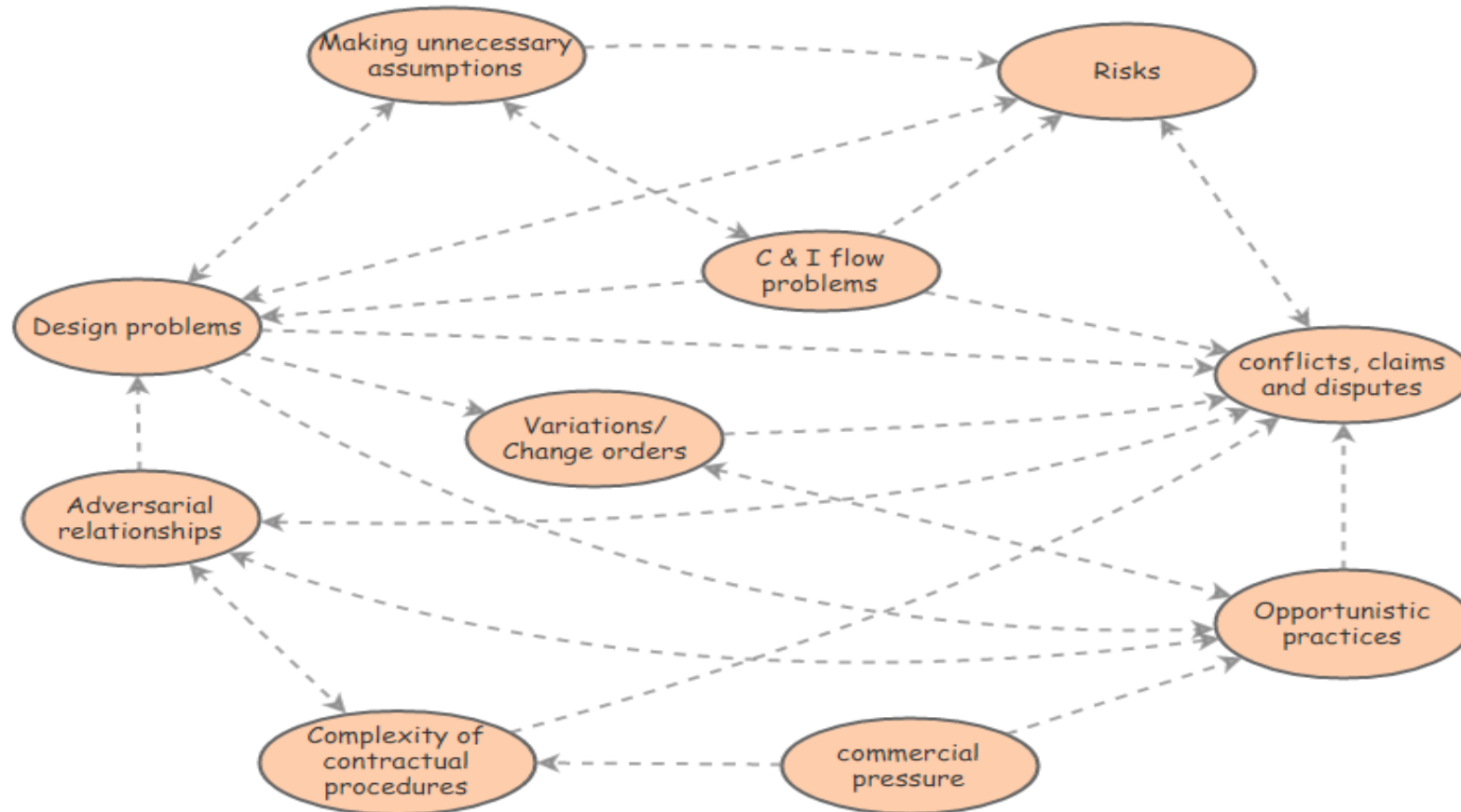








## Dynamic nature of the 'causes of waste' in supply chain:





## CONCLUSIONS

- Prevailing procurement strategies and practices lead to the generation and persistence of process waste in construction projects
- The nature of waste within the construction procurement context is complex, dynamic, interrelated and reciprocal
- Construction procurement practices are shaped by institutional structures, beliefs and attitudes as well as project characteristics (Sarhan et al., 2016, 2017, 2018).
- Tackling prevailing procurement processes may lead to some productivity improvements but won't address the root-cause(s) of the problem
- The prevailing procurement system is not necessary the villain; it is only a malformed messenger of an inevitable outcome due to poor pre-procurement beliefs, assumptions and processes.



construction-procurement practices  
mirror institutional factors

**THANK YOU!**

**QUESTIONS?**

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